

(ii) a thermal polymerization initiator selected from the group consisting of 2,2'-azobis-[N,N'-dimethyleneisobutyramidine] dihydrochloride and derivatives of 2,2'-azobis-[N,N'-dimethyleneisobutyramidine] dihydrochloride, and

(iii) a diagnostic, therapeutic, or prophylactic agent [into an animal's body]; and
applying thermal energy transdermally for a sufficient amount of time to polymerize or crosslink the said prepolymer, or allowing the pre-polymer to polymerize or crosslink using only the animal's own body heat as a thermal energy source.

51. (Amended) The method of claim 17 wherein the polymerizable material has unsaturated functional groups selected from the group consisting of alkenes, alkynes, carbonyls, imines, nitriles, cyano, cyanates, isocyanates, iso-cyano, amides, esters, ketones, aldehydes, ureas, carbonates, carbamates, carboxylic acids, phenyl, aryl, and heteroaryl.

58. (Amended) The method of claim 17 wherein the thermal polymerization initiator has [limited] no toxicity in animals.

Please add the following new claims:

--62. (New) The method of claim 17, wherein the polymerizable material (prepolymer) is selected from the group consisting of acrylates, diacrylates, oligoacrylates, methacrylates, dimethacrylates, and oligomethacrylates.